XY 00 2134/13 4/16 - (C) FILE CAPLUS STN CA Caesar accession nu er: 1908 - 1993:220494 CAPLUS - 118:220494 DN - Synthesis and vesicle formation of cationic surfactants based on TItrisubstituted perfluoroalkylated thiourea - Trabelsi, H.; Szonyi, S.; Gaysinski, M.; Cambon, A.; Watzke, H. J. IN - Lab. Chim. Org. Fluor, Univ. Nice-Sophia Antipolis, Nice, F-06108, CS - Langmuir (1993), 9(5), 1201-5 SO CODEN: LANGD5; ISSN: 0743-7463 DT - Journal LA - English AΒ - New perfluoroalkyl double-chain surfactants were synthesized based on trisubstituted perfluoroalkylated thiourea. These amphiphiles have a modular structure consisting of hydrophobic tails, thiourea as connector, alkyl spacer, and ammonium head group. The modular organization allows an independent variation of the key features in the amphiphilic structure. The synthesis strategy was based on the condensation reaction of 2-(F-alkyl)ethyl isothiocyanates with 3-(dimethylamino)-N-(2-hydroxy-2-F-alkyl)ethyl)-alkylamines and subsequent quaternization by methyliodide to produce the trisubstituted perfluoroalkylated thiourea. The two reaction steps proceed with high yields. The surface activity properties of the new amphiphiles were studied and the ability to self-assemble into bilayer vesicles was detd. by freeze fracture electron microscopy and quasi-elastic light scattering. AN - 1993:220494 CAPLUS DN - 118:220494 TI- Synthesis and vesicle formation of cationic surfactants based on trisubstituted perfluoroalkylated thiourea IN - Trabelsi, H.; Szonyi, S.; Gaysinski, M.; Cambon, A.; Watzke, H. J. CS - Lab. Chim. Org. Fluor, Univ. Nice-Sophia Antipolis, Nice, F-06108, Fr. SO - Langmuir (1993), 9(5), 1201-5 CODEN: LANGD5; ISSN: 0743-7463 DT- Journal LA - English IT - 146993-89-7P 146993-90-0P 146993-91-1P 146993-92-2P 146993-93-3P 146993-94-4P 146993-95-5P RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation) (prepn. and surface tension of, for vesicle formation) RN - 146993-89-7 CAPLUS CN - Ethanaminium, N,N,N-trimethyl-2-[[[(3,3,4,4,5,5,6,6,6nonafluorohexyl)amino]thioxomethyl](3,3,4,4,5,5,6,6,7,7,8,8,8tridecafluoro-2-hydroxyoctyl)amino]-, iodide (9CI) (CA INDEX NAME)

## [--00000049]

RN 146993-90-0 CAPLUS

CN 1-Propanaminium, N,N,N-trimethyl-3-[[[(3,3,4,4,5,5,6,6,6-nonafluorohexyl)amino]thioxomethyl](3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-2-hydroxyoctyl)amino]-, iodide (9CI) (CA INDEX NAME)

## [--00000050]

RN 146993-91-1 CAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[[thioxo[(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)amino]methyl](3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-2-hydroxyoctyl)amino]-, iodide (9CI) (CA INDEX NAME)

[--00000051]

シロエカウコ 1-Propanaminium, N,N,N-trimethyl-3-[[thioxo[(3,3,4,4,5,5,6,6,7,7,8,8 CN ,8-tridecafluorooctyl) no]methyl](3,3,4,4,5,5,6 7,7,8,8,8-tridecafluoro-2-hydrox tyl)amino]-, iodide (9CI (CA INDEX NAME) [--00000052] RN 146993-93-3 CAPLUS CN Ethanaminium, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10heptadecafluoro-2-hydroxydecyl)[[(3,3,4,4,5,5,6,6,6nonafluorohexyl)amino]thioxomethyl]amino]-N,N,N-trimethyl-, iodide (9CI) (CA INDEX NAME) [--00000053] RN146993-94-4 CAPLUS CN 1-Propanaminium, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10heptadecafluoro-2-hydroxydecyl)[[(3,3,4,4,5,5,6,6,6nonafluorohexyl)amino]thioxomethyl]amino]-N,N,N-trimethyl-, iodide (9CI) (CA INDEX NAME) [--000000541 RN 146993-95-5 CAPLUS CN Ethanaminium, 2-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10heptadecafluoro-2-hydroxydecyl)[thioxo[(3,3,4,4,5,5,6,6,7,7,8,8,8tridecafluorooctyl)amino]methyl]amino]-N,N,N-trimethyl-, iodide (9CI) (CA INDEX NAME) [--00000055] TΨ \*\*\*146993-88-6P\*\*\* RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, as cation surfactant) RN 146993-88-6 CAPLUS CN 1-Propanaminium, 3-[(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10heptadecafluoro-2-hydroxydecyl)[thioxo[(3,3,4,4,5,5,6,6,7,7,8,8,8tridecafluorooctyl)amino]methyl]amino]-N,N,N-trimethyl-, iodide (9CI) (CA INDEX NAME) [--00000056] IT \*\*\*147011-97-0P\*\*\* \*\*\*147011-98-1P\*\*\* \*\*\*147011-99-2P\*\*\* \*\*\*147012-00-8P\*\*\* \*\*\*147012-01-9P\*\*\* \*\*\*147012-02-0P\*\*\* \*\*\*147012-03-1P\*\*\* \*\*\*147012-04-2P\*\*\* RL: SPN (Synthetic preparation); PREP (Preparation) (prepn. of, for vesicle formation) RN 147011-97-0 CAPLUS Thiourea, N-[3-(dimethylamino)propyl]-N-CN(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-2hydroxydecyl)-N'-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)-(9CI) (CA INDEX NAME) [--00000057] RN 147011-98-1 CAPLUS CN Thiourea, N-[2-(dimethylamino)ethyl]-N'-(3,3,4,4,5,5,6,6,6-6)nonafluorohexyl)-N-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-2hydroxyoctyl) - (9CI) (CA INDEX NAME) [--00000058] RN 147011-99-2 CAPLUS CNThiourea, N-[3-(dimethylamino)propyl]-N'-(3,3,4,4,5,5,6,6,6nonafluorohexyl)-N-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-2-

[--00000059] 147012-00-8 CAPLUS Thiourea, N-[2-(dimethylamino)ethyl]-N-(3,3,4,4,5,5,6,6,7,7,8,8,8-CN tridecafluoro-2-hydroxyoctyl)-N'-(3,3,4,4,5,5,6,6,7,7,8,8,8tridecafluorooctyl)- (9CI) (CA INDEX NAME) [--00000060] RN147012-01-9 CAPLUS Thiourea, N-[3-(dimethylamino)propyl]-N-(3,3,4,4,5,5,6,6,7,7,8,8,8-CNtridecafluoro-2-hydroxyoctyl)-N'-(3,3,4,4,5,5,6,6,7,7,8,8,8tridecafluorooctyl) - (9CI) (CA INDEX NAME) [--00000061] RN147012-02-0 CAPLUS Thiourea, N-[2-(dimethylamino)ethyl]-N-(3,3,4,4,5,5,6,6,7,7,8,8,9,9, CN10,10,10-heptadecafluoro-2-hydroxydecyl)-N'-(3,3,4,4,5,5,6,6,6nonafluorohexyl) - (9CI) (CA INDEX NAME) [--00000062] RN147012-03-1 CAPLUS CN Thiourea, N-[3-(dimethylamino)propyl]-N-(3,3,4,4,5,5,6,6,7,7,8,8,9,9,10,10,10-heptadecafluoro-2hydroxydecyl)-N'-(3,3,4,4,5,5,6,6,6-nonafluorohexyl)- (9CI) (CA INDEX NAME) [\_\_000000631 RN147012-04-2 CAPLUS Thiourea, N-[2-(dimethylamino)ethyl]-N-(3,3,4,4,5,5,6,6,7,7,8,8,9,9, CN 10,10,10-heptadecafluoro-2-hydroxydecyl)-N'-(3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluorooctyl)- (9CI) (CA INDEX NAME) [--00000064]

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 $\begin{array}{c} \text{S} \\ \text{F}_3\text{C}-- (\text{CF}_2)_5 - \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{C} \\ \text{Me}_3^+\text{N}-- \text{CH}_2 - \text{CH}_2 - \text{N}-- \text{CH}_2 - \text{CH}-- (\text{CF}_2)_5 - \text{CF}_3 \end{array}$ 

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 $\begin{array}{c} \text{S} \\ \text{F3C-} (\text{CF}_2)_5 - \text{CH}_2 - \text{CH}_2 - \text{NH} - \text{C} \\ \text{Me}_3^+ \text{N--} \text{CH}_2 - \text{CH}_2 - \text{N--} \text{CH}_2 - \text{CH--} (\text{CF}_2)_7 - \text{CF}_3 \end{array}$ 

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$$\begin{array}{c} \text{C} \\ \text{OH} \\ \text{C} \\ \text{NH} \\ \text{CH}_2 \\ \text{CH}_2 \\ \text{CF}_2)_3 \\ \text{CF}_3 \\ \text{F}_3 \\ \text{C} \\ \text{CF}_2)_5 \\ \text{CH} \\ \text{CH}_2 \\ \text{N} \\ \text{CH}_2 \\ \text{N} \\ \text{CH}_2)_3 \\ \text{NMe}_2 \\ \end{array}$$

$$\begin{array}{c} \text{S} \\ \text{F3C-} (\text{CF2}) \, \text{5-} \, \text{CH}_2 - \text{CH}_2 - \text{NH--C} \\ \text{Me}_2 \text{N--CH}_2 - \text{CH}_2 - \text{N--CH}_2 - \text{CH} \\ \end{array}$$